

Work Order ID 93338

93338

Page 1

November-15-12 11:43:17 AM

Item ID: 646.3715 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Strut Doubler
 Start Date: 11/15/12 Start Qty: 20.00 *20* Cust Item ID:
 Required Date: 12/07/12 Req'd Qty: 20.00 *20* Customer:
 Reference:

Approvals: Process Plan: MLJ Date: 12-11-12 Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
646.3700	A								
110		0.00							
110									
Waterjet	Memo	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg								
6061 . 040	Dwg Rev: <u>A</u>								
	Prog Rev: <u>A</u>								
	2-Deburr if necessary								
120	QC2- Inspect parts off machine FAI/FAIB	0.00							
120									
QC	Memo	0.00							
Quality Control									

(30)

B12-12-16

(30)

B12-12-16

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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93338

November-15-12 11:43:17 AM

N900040100

Setup Start *NS1*

Stop *NS2*

20

Cust Item ID:

20

Customer:

Reference:

Run Start *NR1*

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

**Insp.
Stamp**

0.00

130

QC

Memo

0.00

Quality Control

0.00

140

Outsource4

Outsource process - Anodize

Memo

0.00

Issue P/O:

HARD ANODIZE, COLOR BLACK AS PER DWG.(SEE NOTE 2)

0.00

150

Packaging

Packaging

Memo

0.00

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

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Page 3

November-15-12 11:43:17 AM

Item ID: 646.3715 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Strut Doubler
 Start Date: 11/15/12 Start Qty: 20.00 *20* Cust Item ID:
 Required Date: 12/07/12 Req'd Qty: 20.00 *20* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 *160* QC. Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 DAS 16 13/04/10 0.00							
170 *170* SprayPaint Spray Painting	Memo PRIME IAW MIL-P-23377J TYPE I CLASS N AS PER DWG. (SEE NOTE 2) CARDINAL 4860-50 PRIMER BATCH: 124204	0.00 0.00				30	0	0	AP 13-3-22
180 *180* QC Quality Control	QC14- Inspect Spray Paint Memo	0.00 DAS 16 13/04/10 0.00				(X30)			counts

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

FAULT CATEGORY

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

Work Order ID 93338

93338

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November-15-12 11:43:17 AM

Item ID: 646.3715 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Strut Doubler
 Start Date: 11/15/12 Start Qty: 20.00 *20* Cust Item ID:
 Required Date: 12/07/12 Req'd Qty: 20.00 *20* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Identify as per dwg & Stock Location	0.00							
190									
Packaging	Memo	0.00							
Packaging	***IDENTIFY AS PER APICAL MPP-120 BY STAMPING THE P# AND REV***								
200	QC21- Final Inspection - Work Order Release	0.00							
200									
QC	Memo	0.00							
Quality Control									

30x
 13-4-10
 13/4/10
 MF
 13-4-10

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>						
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector			
Doc/Data <input type="checkbox"/>												
Equip/Tooling <input type="checkbox"/>												
Operator <input type="checkbox"/>												
Material <input type="checkbox"/>												
Setup <input type="checkbox"/>												
Other <input type="checkbox"/>												
Process <input type="checkbox"/>												
Supplier <input type="checkbox"/>												
Training <input type="checkbox"/>												
Unapproved <input type="checkbox"/>												
FAULT CATEGORY												
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <hr/> <hr/> <hr/>		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other <hr/> <hr/> <hr/>	

Picklist Print

November-15-12 11:43:17 AM

Page 1

Work Order ID: 93338

Parent Item: 646.3715

Parent Item Name: Strut Doubler

Start Date: 11/15/12

Required Date: 12/07/12

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP REV:A 12.10.22 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.040 6061-T6 .040 Sheet		Purchased	No			110	sf	156.6578	0.0434	0.9136842	1.5	12-12-16	

Location

Loc Qty

Loc Code

MAT021

156.6578

121099

156.6578

123 873

30

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

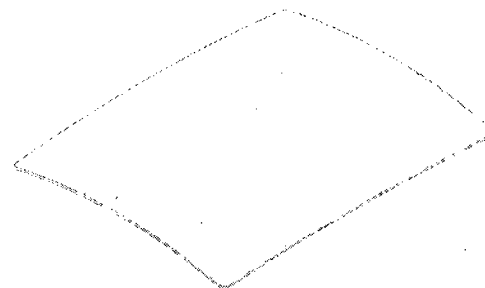
QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:25%;">Skid-tube <input type="checkbox"/></td> <td style="width:25%;">Crosstube <input type="checkbox"/></td> <td style="width:25%;">Water Jet <input type="checkbox"/></td> <td style="width:25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>						Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>																								
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>																								
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FAULT CATEGORY																											
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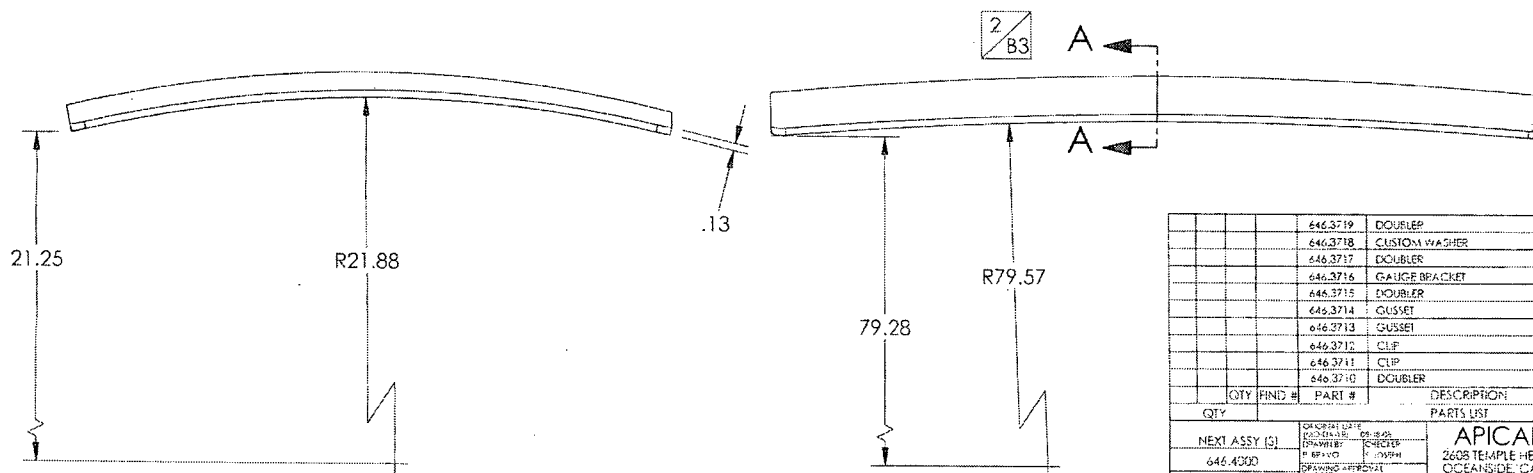
NOTES:

1. MATERIAL: ALUMINUM 6061-T6 PER AMS-QQ-A-250/11
2. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III CLASS 2, COLOR BLACK; CARDINAL 4860-SG PRETREATMENT PRIMER PRIME IAW MIL-P-23377J TYPE I CLASS N
3. MATERIAL: 17-4 PH AMS 5604, CONDITION H900
4. FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N
5. DEBURR AND BREAK ALL SHARP EDGES
6. IDENTIFY IAW MPP-120

SHOP COPY
RETURN TO
ENGINEER NG
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO 93338 M25
12-11-16

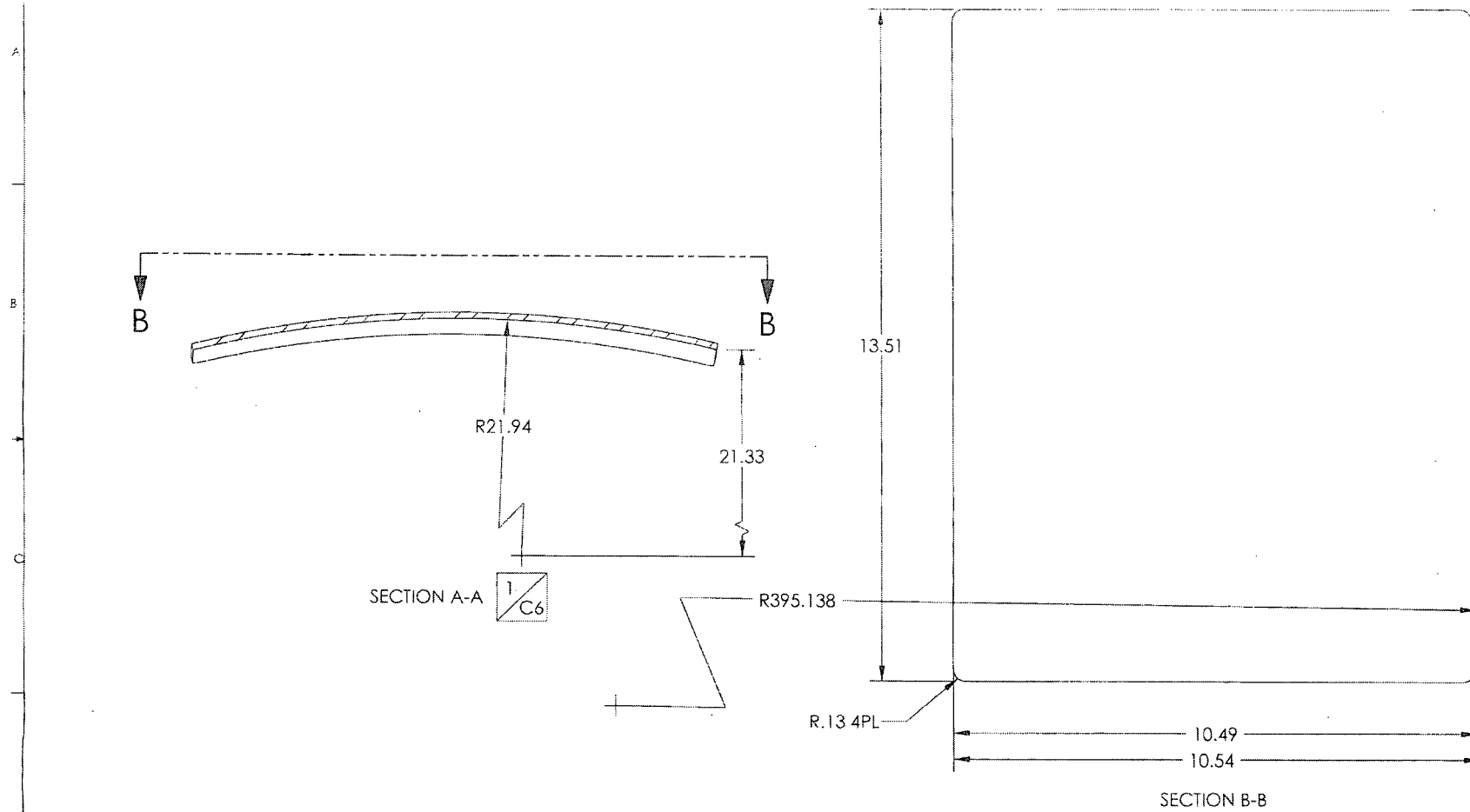


646.3710



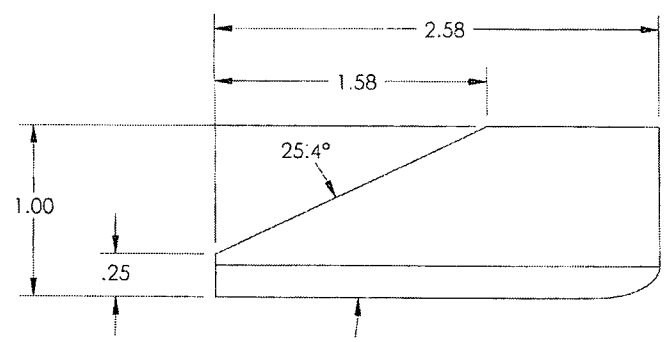
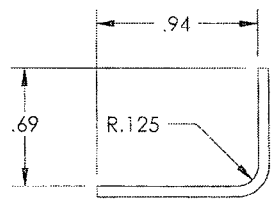
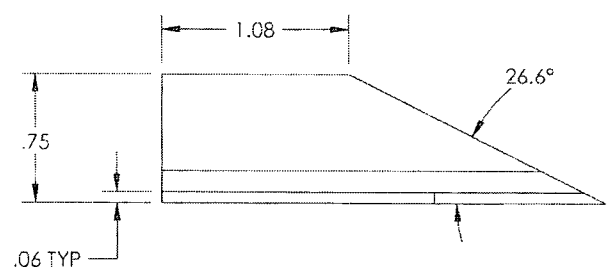
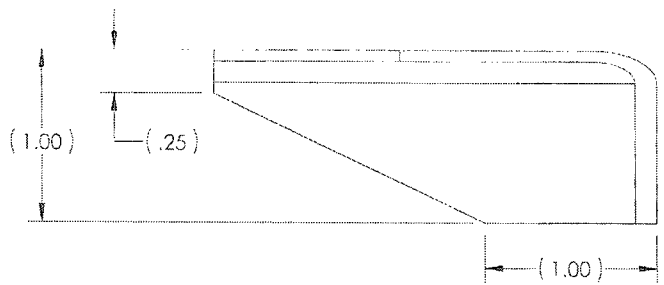
QTY	FINI #	PART #	DESCRIPTION	MATL	SPEC.
		646.3719	DOUBLER	▲	▲
		646.3718	CUSTOM WASHER	▲	▲
		646.3717	DOUBLER	▲	▲
		646.3716	GAUGE BRACKET	▲	▲
		646.3715	DOUBLER	▲	▲
		646.3714	GUSSET	▲	▲
		646.3713	GUSSET	▲	▲
		646.3712	CLIP	▲	▲
		646.3711	CLIP	▲	▲
		646.3710	DOUBLER	▲	▲
PARTS LIST			APICAL INDUSTRIES		
NEXT ASSY (S)			2605 TEMPLE HEIGHTS DR.		
646.4200			OCEANSIDE, CA. 92055-3512 17601724-5300		
			SHEETMETAL		
			SIZE [CHG CODE] [DWG NO]	646.3700	
			B 07M26	SHEET 1 OF 9	
			SCALE NONE		

93338



CORPORATE 1000 17th ST OCEANSIDE, CA 92056-3512 (760) 724-5300		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA 92056-3512 (760) 724-5300	
SHEETMETAL		SHEETMETAL	
INCHES UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE APPROXIMATE TOLERANCES ARE: 2 PLACE DECIMALS ±.01 3 PLACE DECIMALS ±.005 ANGLES ±.5°	Dwg. No. 646.3700	Date 07/20/06	Rev. A
SCALE: NONE		SHEET 2 OF 9	

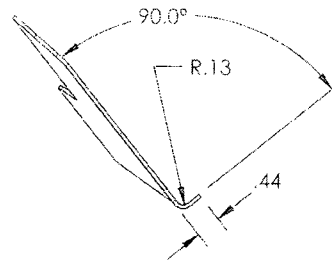
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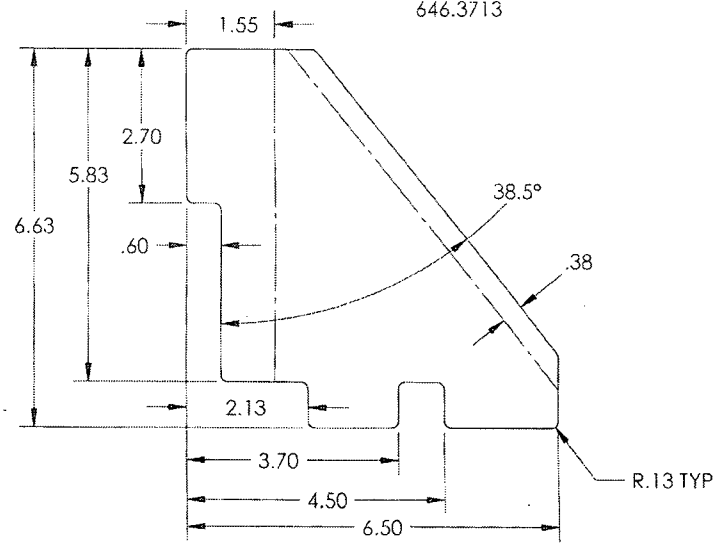
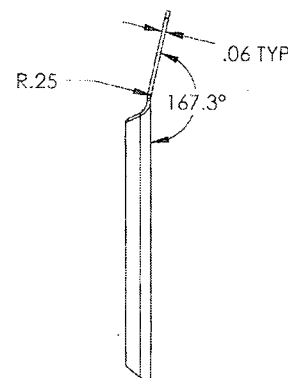
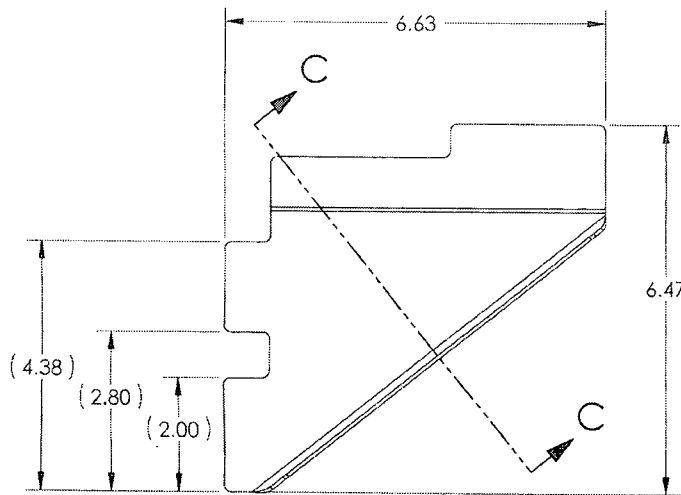
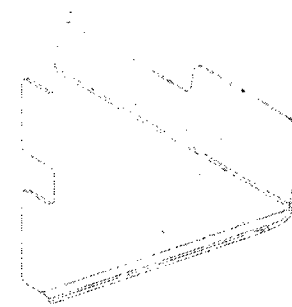
646.3711 SHOWN
646.3712 OPPOSITE

NEXT ASSY (S)	OVERALL DATE 08-18-05		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA, 92056-3512 (760)724-5300	
	DESIGNER: J. JOSEPH			
	P. BRAND		SHEETMETAL	
	DESIGNED BY: J. JOSEPH			
WHERE SHOWN: SEE PARTS	CHECKED BY: J. JOSEPH		DWG. NO. 646.3700	
	DRAWN BY: J. JOSEPH			
	WHERE SHOWN: SEE PARTS		SCALE: 1:1	
			SHEET 1 OF 1	

93338



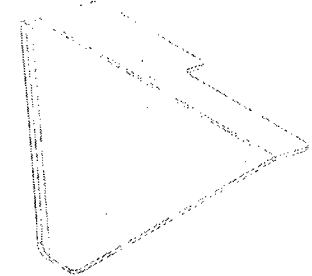
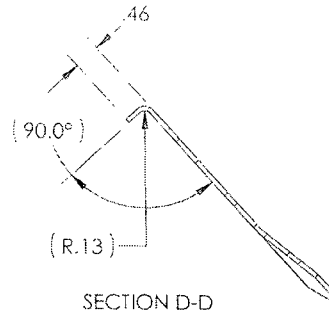
SECTION C-C



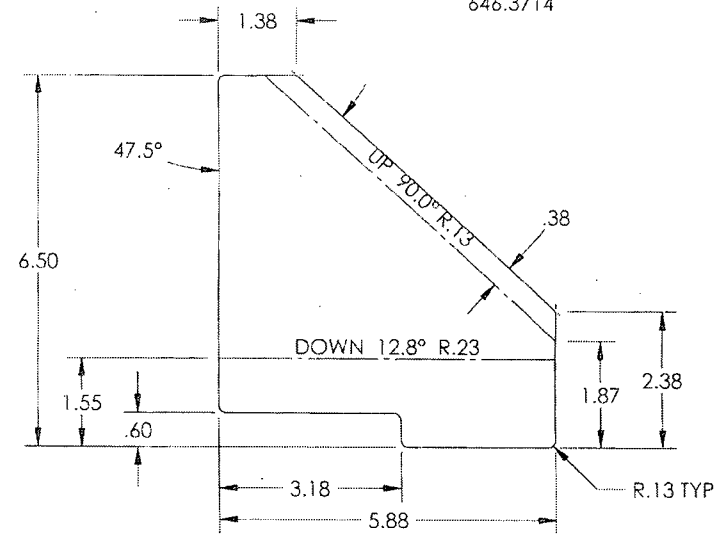
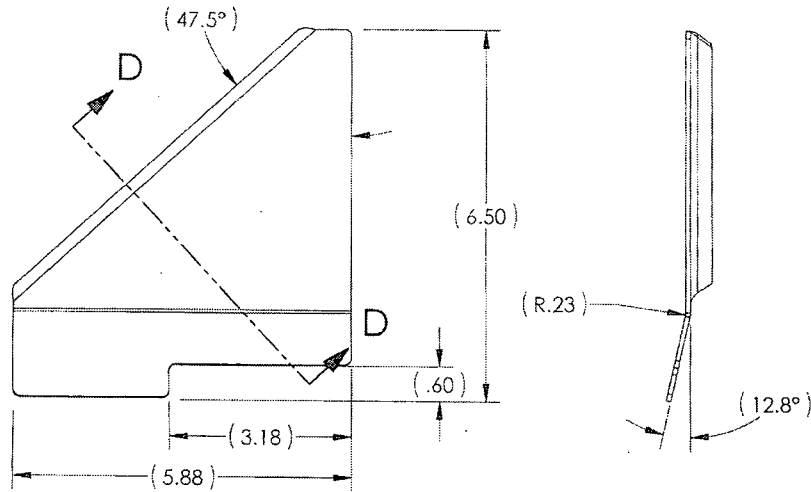
FLAT PATTERN

NEXT ASSY (S)	ENGINEER DATE	03-18-06	APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 760/724-5300	
	DESIGNED BY	11/05/PM		
	DRAWN BY	03-18-06		
	CHECKED BY	03-18-06		
SHEETMETAL			DATE: 07/26/06 SCALE: 1"=1"	
PART NO: 646.3700 REV: A			SHEET 1 OF 1	

93338

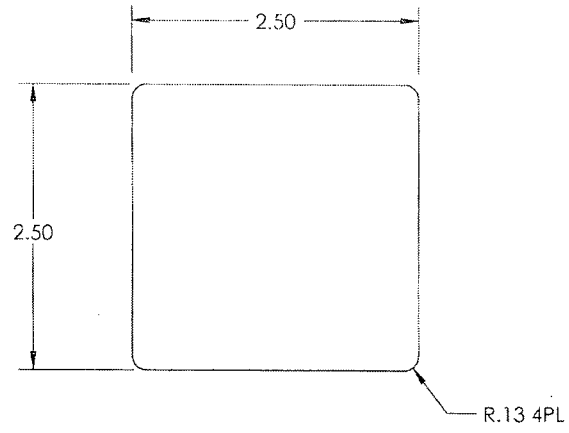


646.3714



CREATOR DATE: 06-10-08 DRAWN BY: J. JENSEN P. BRADY CHECKED BY: J. JENSEN DATE: 06-10-08		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300	
DESIGN APPROVAL: DATE: 06-10-08 BY: J. JENSEN		SHEETMETAL	
ALL DIMENSIONS UNLESS SPECIFIED DIMENSIONS ARE IN INCHES UNLESS SPECIFIED TO THE CONTRARY		DEL. CATEGORY: B DWG. NO: 646.3700	SHEET: 5 OF 9

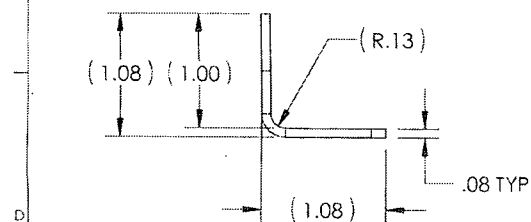
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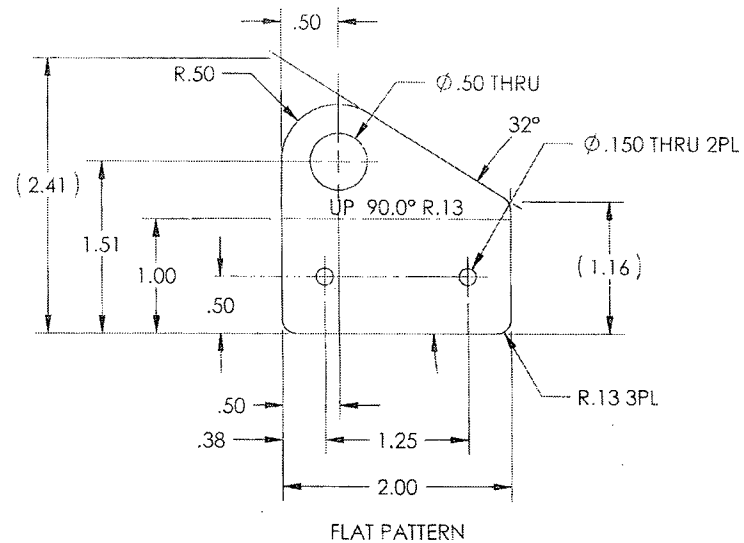
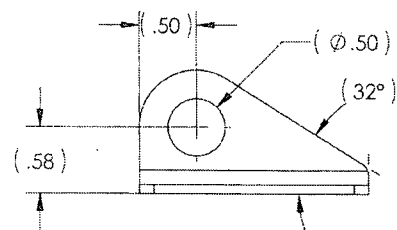
646.3715

NEXT ASSY (S)	OPTIONAL DATE		60-18-08		APICAL INDUSTRIES 2608 TEMPLE HEIGHTS DR. OCEANSIDE, CA. 92056-3512 (760)724-5300
	DRAWN BY	60-18-08	60-18-08	60-18-08	
	DESIGNED BY	60-18-08	60-18-08	60-18-08	
	CONTRACT NO.	60-18-08	60-18-08	60-18-08	
	UNLESS OTHERWISE SPECIFIED				
DIMENSIONS ARE IN INCHES				SIZE CLASS CODE DWG NO. REV A	
TOLERANCES ARE:					
FRACTIONS DECIMALS ANGLES					
NONE .0001 1/2				SCALE: NONE SHEET 6 OF 9	
6 1 7 8					

1. **NAME** (Last, First, Middle Initial) _____
 2. **DATE** (Month/Day/Year) _____
 3. **TIME** (Hour/Minute) _____
 4. **LOCATION** (Room/Building) _____
 5. **INSTRUCTOR** (Name) _____
 6. **STUDENT ID** (Number) _____
 7. **SECTION** (Number) _____
 8. **TOPIC** (Name) _____
 9. **OBJECTIVES** (List) _____
 10. **ASSESSMENT** (Type) _____
 11. **GRADING** (Scale) _____
 12. **REMARKS** (Text) _____
 13. **SIGNATURE** (Name) _____
 14. **DATE** (Month/Day/Year) _____
 15. **TIME** (Hour/Minute) _____
 16. **LOCATION** (Room/Building) _____
 17. **INSTRUCTOR** (Name) _____
 18. **STUDENT ID** (Number) _____
 19. **SECTION** (Number) _____
 20. **TOPIC** (Name) _____
 21. **OBJECTIVES** (List) _____
 22. **ASSESSMENT** (Type) _____
 23. **GRADING** (Scale) _____
 24. **REMARKS** (Text) _____
 25. **SIGNATURE** (Name) _____
 26. **DATE** (Month/Day/Year) _____
 27. **TIME** (Hour/Minute) _____
 28. **LOCATION** (Room/Building) _____
 29. **INSTRUCTOR** (Name) _____
 30. **STUDENT ID** (Number) _____
 31. **SECTION** (Number) _____
 32. **TOPIC** (Name) _____
 33. **OBJECTIVES** (List) _____
 34. **ASSESSMENT** (Type) _____
 35. **GRADING** (Scale) _____
 36. **REMARKS** (Text) _____
 37. **SIGNATURE** (Name) _____
 38. **DATE** (Month/Day/Year) _____
 39. **TIME** (Hour/Minute) _____
 40. **LOCATION** (Room/Building) _____
 41. **INSTRUCTOR** (Name) _____
 42. **STUDENT ID** (Number) _____
 43. **SECTION** (Number) _____
 44. **TOPIC** (Name) _____
 45. **OBJECTIVES** (List) _____
 46. **ASSESSMENT** (Type) _____
 47. **GRADING** (Scale) _____
 48. **REMARKS** (Text) _____
 49. **SIGNATURE** (Name) _____
 50. **DATE** (Month/Day/Year) _____
 51. **TIME** (Hour/Minute) _____
 52. **LOCATION** (Room/Building) _____
 53. **INSTRUCTOR** (Name) _____
 54. **STUDENT ID** (Number) _____
 55. **SECTION** (Number) _____
 56. **TOPIC** (Name) _____
 57. **OBJECTIVES** (List) _____
 58. **ASSESSMENT** (Type) _____
 59. **GRADING** (Scale) _____
 60. **REMARKS** (Text) _____
 61. **SIGNATURE** (Name) _____
 62. **DATE** (Month/Day/Year) _____
 63. **TIME** (Hour/Minute) _____
 64. **LOCATION** (Room/Building) _____
 65. **INSTRUCTOR** (Name) _____
 66. **STUDENT ID** (Number) _____
 67. **SECTION** (Number) _____
 68. **TOPIC** (Name) _____
 69. **OBJECTIVES** (List) _____
 70. **ASSESSMENT** (Type) _____
 71. **GRADING** (Scale) _____
 72. **REMARKS** (Text) _____
 73. **SIGNATURE** (Name) _____
 74. **DATE** (Month/Day/Year) _____
 75. **TIME** (Hour/Minute) _____
 76. **LOCATION** (Room/Building) _____
 77. **INSTRUCTOR** (Name) _____
 78. **STUDENT ID** (Number) _____
 79. **SECTION** (Number) _____
 80. **TOPIC** (Name) _____
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 82. **ASSESSMENT** (Type) _____
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 84. **REMARKS** (Text) _____
 85. **SIGNATURE** (Name) _____
 86. **DATE** (Month/Day/Year) _____
 87. **TIME** (Hour/Minute) _____
 88. **LOCATION** (Room/Building) _____
 89. **INSTRUCTOR** (Name) _____
 90. **STUDENT ID** (Number) _____
 91. **SECTION** (Number) _____
 92. **TOPIC** (Name) _____
 93. **OBJECTIVES** (List) _____
 94. **ASSESSMENT** (Type) _____
 95. **GRADING** (Scale) _____
 96. **REMARKS** (Text) _____
 97. **SIGNATURE** (Name) _____
 98. **DATE** (Month/Day/Year) _____
 99. **TIME** (Hour/Minute) _____
 100. **LOCATION** (Room/Building) _____
 101. **INSTRUCTOR** (Name) _____
 102. **STUDENT ID** (Number) _____
 103. **SECTION** (Number) _____
 104. **TOPIC** (Name) _____
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 107. **GRADING** (Scale) _____
 108. **REMARKS** (Text) _____
 109. **SIGNATURE** (Name) _____
 110. **DATE** (Month/Day/Year) _____
 111. **TIME** (Hour/Minute) _____
 112. **LOCATION** (Room/Building) _____
 113. **INSTRUCTOR** (Name) _____
 114. **STUDENT ID** (Number) _____
 115. **SECTION** (Number) _____
 116. **TOPIC** (Name) _____
 117. **OBJECTIVES** (List) _____
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 122. **DATE** (Month/Day/Year) _____
 123. **TIME** (Hour/Minute) _____
 124. **LOCATION** (Room/Building) _____
 125. **INSTRUCTOR** (Name) _____
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 127. **SECTION** (Number) _____
 128. **TOPIC** (Name) _____
 129. **OBJECTIVES** (List) _____
 130. **ASSESSMENT** (Type) _____
 131. **GRADING** (Scale) _____
 132. **REMARKS** (Text) _____
 133. **SIGNATURE** (Name) _____
 134. **DATE** (Month/Day/Year) _____
 135. **TIME** (Hour/Minute) _____
 136. **LOCATION** (Room/Building) _____
 137. **INSTRUCTOR** (Name) _____
 138. **STUDENT ID** (Number) _____
 139. **SECTION** (Number) _____
 140. **TOPIC** (Name) _____
 141. **OBJECTIVES** (List) _____
 142. **ASSESSMENT** (Type) _____
 143. **GRADING** (Scale) _____
 144. **REMARKS** (Text) _____
 145. **SIGNATURE** (Name) _____
 146. **DATE** (Month/Day/Year) _____
 147. **TIME** (Hour/Minute) _____
 148. **LOCATION** (Room/Building) _____
 149. **INSTRUCTOR** (Name) _____
 150. **STUDENT ID** (Number) _____
 151. **SECTION** (Number) _____
 152. **TOPIC** (Name) _____
 153. **OBJECTIVES** (List) _____
 154. **ASSESSMENT** (Type) _____
 155. **GRADING** (Scale) _____
 156. **REMARKS** (Text) _____
 157. **SIGNATURE** (Name) _____
 158. **DATE** (Month/Day/Year) _____
 159. **TIME** (Hour/Minute) _____
 160. **LOCATION** (Room/Building) _____
 161. **INSTRUCTOR** (Name) _____
 162. **STUDENT ID** (Number) _____
 163. **SECTION** (Number) _____
 164. **TOPIC** (Name) _____
 165. **OBJECTIVES** (List) _____
 166. **ASSESSMENT** (Type) _____
 167. **GRADING** (Scale) _____
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 169. **SIGNATURE** (Name) _____
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 171. **TIME** (Hour/Minute) _____
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 175. **SECTION** (Number) _____
 176. **TOPIC** (Name) _____
 177. **OBJECTIVES** (List) _____
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 179. **GRADING** (Scale) _____
 180. **REMARKS** (Text) _____
 181. **SIGNATURE** (Name) _____
 182. **DATE** (Month/Day/Year) _____
 183. **TIME** (Hour/Minute) _____
 184. **LOCATION** (Room/Building) _____
 185. **INSTRUCTOR** (Name) _____
 186. **STUDENT ID** (Number

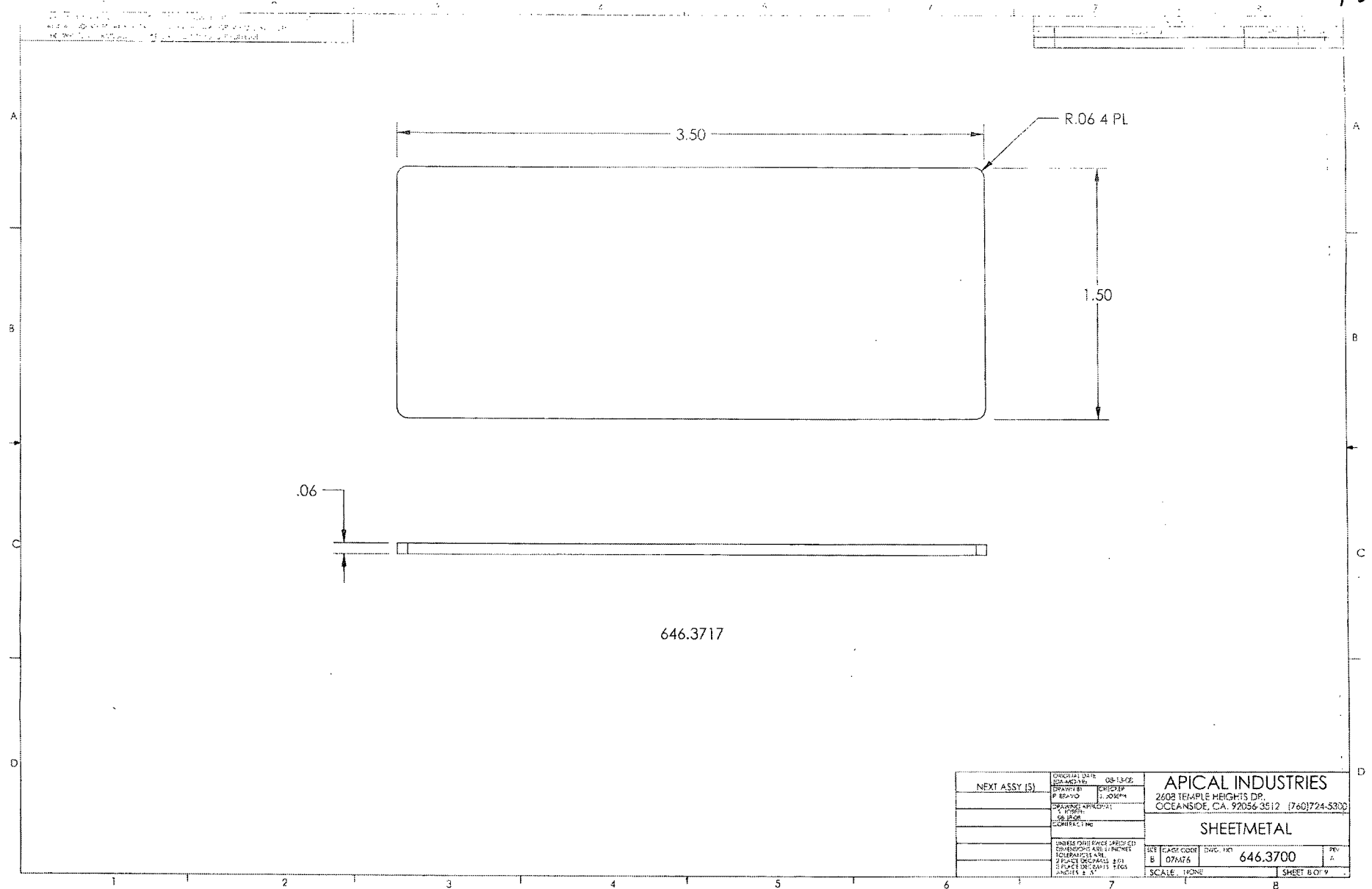


646.3716

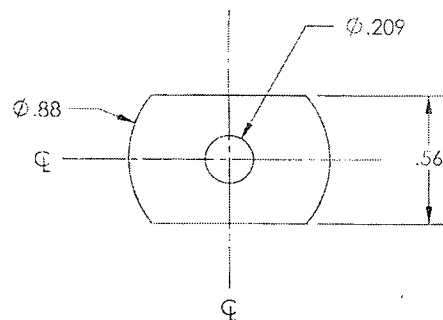


NEXT ASSY (\$) 1.000000 2.000000 3.000000 4.000000 5.000000 6.000000 7.000000 8.000000 9.000000 10.000000 11.000000 12.000000 13.000000 14.000000 15.000000 16.000000 17.000000 18.000000 19.000000 20.000000 21.000000 22.000000 23.000000 24.000000 25.000000 26.000000 27.000000 28.000000 29.000000 30.000000 31.000000 32.000000 33.000000 34.000000 35.000000 36.000000 37.000000 38.000000 39.000000 40.000000 41.000000 42.000000 43.000000 44.000000 45.000000 46.000000 47.000000 48.000000 49.000000 50.000000 51.000000 52.000000 53.000000 54.000000 55.000000 56.000000 57.000000 58.000000 59.000000 60.000000 61.000000 62.000000 63.000000 64.000000 65.000000 66.000000 67.000000 68.000000 69.000000 70.000000 71.000000 72.000000 73.000000 74.000000 75.000000 76.000000 77.000000 78.000000 79.000000 80.000000 81.000000 82.000000 83.000000 84.000000 85.000000 86.000000 87.000000 88.000000 89.000000 90.000000 91.000000 92.000000 93.000000 94.000000 95.000000 96.000000 97.000000 98.000000 99.000000 100.000000 101.000000 102.000000 103.000000 104.000000 105.000000 106.000000 107.000000 108.000000 109.000000 110.000000 111.000000 112.000000 113.000000 114.000000 115.000000 116.000000 117.000000 118.000000 119.000000 120.000000 121.000000 122.000000 123.000000 124.000000 125.000000 126.000000 127.000000 128.000000 129.000000 130.000000 131.000000 132.000000 133.000000 134.000000 135.000000 136.000000 137.000000 138.000000 139.000000 140.000000 141.000000 142.000000 143.000000 144.000000 145.000000 146.000000 147.000000 148.000000 149.000000 150.000000 151.000000 152.000000 153.000000 154.000000 155.000000 156.000000 157.000000 158.000000 159.000000 160.000000 161.000000 162.000000 163.000000 164.000000 165.000000 166.000000 167.000000 168.000000 169.000000 170.000000 171.000000 172.000000 173.000000 174.000000 175.000000 176.000000 177.000000 178.000000 179.000000 180.000000 181.000000 182.000000 183.000000 184.000000 185.000000 186.000000 187.000000 188.000000 189.000000 190.000000 191.000000 192.000000 193.000000 194.000000 195.000000 196.000000 197.000000 198.000000 199.000000 200.000000 201.000000 202.000000 203.000000 204.000000 205.000000 206.000000 207.000000 208.000000 209.000000 210.000000 211.000000 212.000000 213.000000 214.000000 215.000000 216.000000 217.000000 218.000000 219.000000 220.000000 221.000000 222.000000 223.000000 224.000000 225.000000 226.000000 227.000000 228.000000 229.000000 230.000000 231.000000 232.000000 233.000000 234.000000 235.000000 236.000000 237.000000 238.000000 239.000000 240.000000 241.000000 242.000000 243.000000 244.000000 245.000000 246.000000 247.000000 248.000000 249.000000 250.000000 251.000000 252.000000 253.000000 254.000000 255.000000 256.000000 257.000000 258.000000 259.000000 260.000000 261.000000 262.000000 263.000000 264.000000 265.000000 266.000000 267.000000 268.000000 269.000000 270.000000 271.000000 272.000000 273.000000 274.000000 275.000000 276.000000 277.000000 278.000

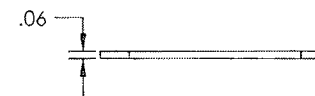
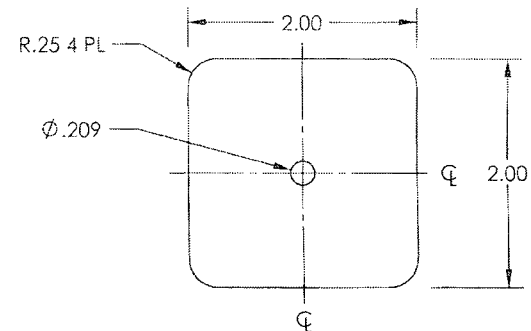
93338



93338



646.3718



646.3719

NEXT ASSY (S)	DESIGNED BY	CB-18-05	APICAL INDUSTRIES	
	DESIGNED BY	CB-18-05		
	DESIGNED BY	CB-18-05	2608 TEMPLE HEIGHTS DR.	
	DESIGNED BY	CB-18-05	OCEANSIDE, CA. 92056-3512 (760)724-5300	
UNLESS OTHERWISE SPECIFIED DIMENSIONS TO FACE UNLESS NOTED SPRINGS TO DIMENSIONS ANGLES ± 5°	DESIGNED BY	CB-18-05	SHEETMETAL	
	DESIGNED BY	CB-18-05	DATE: 07/18/16	
	DESIGNED BY	CB-18-05	DWG. NO. 646.3700	
	DESIGNED BY	CB-18-05	SCALE: NONE	
			SHEET 0 OF 4	



A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62212

Date: 13-Feb-13

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To


DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms	Ship Via
Quantity	Description
1 lot	Part: ASST Rev: 4 PCS 647.2010 14 PCS 647.2011 4 PCS 646.9910 4 PCS 647.1813 3 PCS 647.7915 8 PCS 649.4816 170 PCS 646.9910 30 PCS 646.3715 - 8/13/09/10 4 PCS 647.7914 14 PCS 646.3713 41 PCS 649.4813 4 PCS 647.1910 16 PCS 646.9710 HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 Job: 20130090 PO: PO18829 Line:
Certificate of Conformance	
A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order.	
ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY	
DATE : 13/2/13	
CERTIFIED SIGNATURE : 	
RECEIVER SIGNATURE : _____	